

REMARKS/ARGUMENTS

Favorable reconsideration of this application as currently amended and in light of the following discussion is respectfully requested.

Claims 1-10 and 12-19 are currently pending. The present Amendment amends Claims 1 and 12 and cancels Claim 11. The changes to the claims are supported by the originally filed application, thus no new matter has been added.

In the outstanding Office Action, Claims 1-10 and 12-19 were rejected under 35 U.S.C. § 102(b) as anticipated by Ito et al. (U.S. Patent No. 5,748,179, herein "Ito") and Claim 11 was rejected under 35 U.S.C. § 103(a) as unpatentable over Ito in view of Shiota et al. (U.S. Patent No. 6,111,628, herein "Shiota").

In response to the rejection of Claims 1-10 and 12-19 under 35 U.S.C. § 102(b), Claims 1 and 12 are amended to incorporate the features of Claim 11, which features were admitted in the Office Action not to be taught by Ito.

Claim 1 describes a display device including a line terminal (see Fig. 2, element 12 as a non-limiting example) connected to both a lead line (13) and a terminal of a drive circuit (7) mounted in the peripheral area of the insulating substrate (1) by an anisotropic conductive material (16) through a transparent conductive film (15). Further, an external line terminal (10) is connected to an external line (9) formed on a periphery of the peripheral area of the insulating substrate (1) and connected to a terminal of the drive circuit (7) by the anisotropic conductive material (16). The surface of the line terminal (12) to be connected to the transparent conductive film (15) is formed by a high resistance conductive film and the surface of the external line terminal (10) to be connected to the terminal of the drive circuit (7) by the anisotropic conductive material (16) is formed by a low resistance conductive film. Thus, a display device with superior electrical connection between the terminal of the drive

circuit (7) and the terminal of the insulating substance (10) is thereby achieved. Amended Claim 12 is a method for manufacturing a display device similar to amended Claim 1.

The outstanding Office Action relies on Ito as describing the features of independent Claims 1 and 12. Ito describes a liquid crystal display device that comprises a line terminal (bump) connected to a lead line and connected to a terminal of a drive circuit mounted in the peripheral area of the insulating substrate by an anisotropic conductive material (ACF2) through a conductive film (ACF2), and an external line terminal connected to an external line and connected to a terminal of the drive circuit by the conductive material (ACF2).¹ Further a surface of the line terminal to be connected to the transparent conductive film (ACF2) is formed by high resistance conductive film (d1), and a surface of the external line terminal to be connected to the terminal of the drive circuit by a conductive material (d1) is formed by a low resistance conductive film (g1).

However, Ito does not describe or suggest that the terminal of the drive circuit connected to the line terminal by the conductive material through the transparent conductive film and the terminal of the drive circuit connected directly to the external line terminal by the conductive material have a difference in height, which is substantially equal to a difference in height of the transparent conductive film on the line terminal, and the external line terminal, formed above the insulating substrate and connected respectively to the terminals of the drive circuit.

Therefore, Ito fails to teach or suggest every feature recited in Applicants' amended independent Claims 1 and 12, so that Claims 1-10 and 12-19 are patentably distinct over Ito. Accordingly, Applicants respectfully request reconsideration of the rejection under 35 U.S.C. § 102(b) based on Ito.²

¹ Ito, Fig. 22, Col. 4.

² See M.P.E.P. 2131: "A claim is anticipated only if each and every element as set forth in the claim is found,

The outstanding Office Action relies on Shiota as curing the above noted deficiencies of Ito. Shiota describes that if the uneven height of the bump electrode is more than $3\mu\text{m}$, the conductive particles dispersed in the anisotropic conductive adhesive may not be able to provide electrical connection between the bump electrodes of the driver IC.³

Specifically, the Office Action asserts that “Shiota et al discloses (Column 6, Row 21-29) that if the difference between the uneven heights of the bump electrode 5 is more than $3\mu\text{m}$, the conductive particles dispersed in the anisotropic conductive adhesive may not be able to provide electrical connection between the bump electrodes 5 of the driver IC” and that “[i]t would be obvious to have equal heights of the transparent film on the line terminal and the external line terminal formed above the insulating substrate.”⁴

Applicant respectfully disagrees and submits that the assertion that if the difference between the uneven heights of the bump electrode 5 is more than $3\mu\text{m}$, the conductive particles dispersed in the anisotropic conductive adhesive may not be able to provide electrical connection only suggests not to exceed 3 micrometers, and does not teach or suggest anything pertaining to an equality. Applicant respectfully submits that the claimed subject matter does not impose an upper bound on the difference in height, but rather the claims recite what this difference should be substantially equal to. In particular, amended independent Claims 1 and 12 recite that “...the conductive material *have a difference in height, which is substantially equal to a difference in height of the transparent conductive film on the line terminal, and the external line terminal, formed above the insulating substrate and connected respectively to the terminals of the drive circuit.*” It is respectfully submitted that there is no mention or suggestion of this feature in Shiota which merely

either expressly or inherently described, in a single prior art reference,” (Citations omitted) (emphasis added). See also M.P.E.P. 2143.03: “All words in a claim must be considered in judging the patentability of that claim against the prior art.”

³ Shiota, Col. 6.

⁴ outstanding Office Action, page 7, third paragraph.

indicates that a height difference between uneven heights of the bump electrode should not exceed a certain value.

Therefore, Shiota fails to cure the deficiencies of Ito and thus independent Claims 1 and 12 and claims depending therefrom are patentably distinct over Ito and Shiota.

Accordingly, Applicants respectfully submit independent Claim 1 and 12 and claims dependent therefrom are allowable.

Consequently, in view of the present amendment, no further issues are believed to be outstanding in the present application, and the present application is believed to be in condition for formal Allowance. A Notice of Allowance for Claims 1-10 and 12-19 is earnestly solicited.

Respectfully submitted,

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